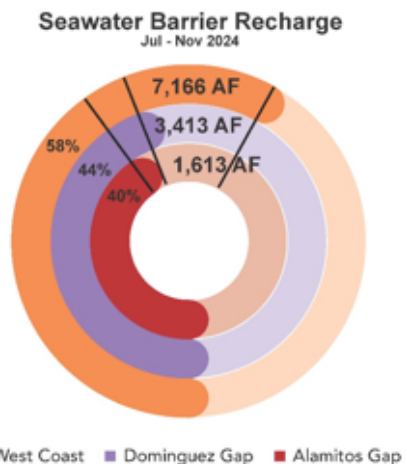
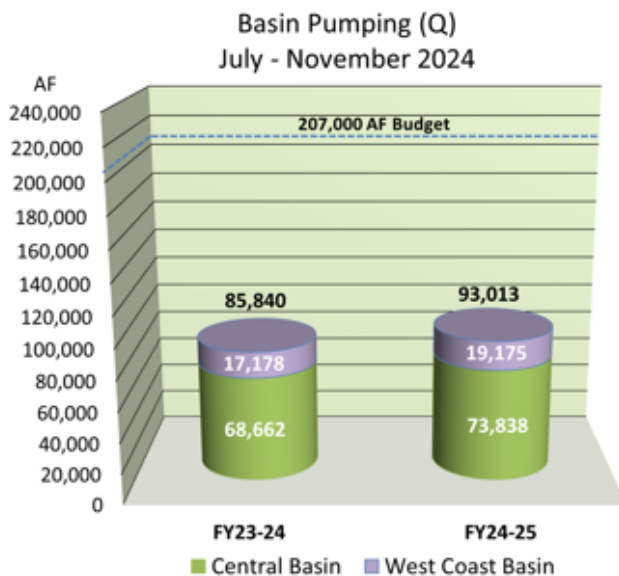
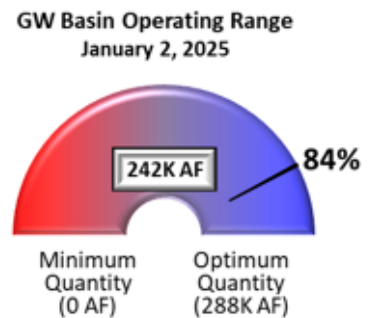
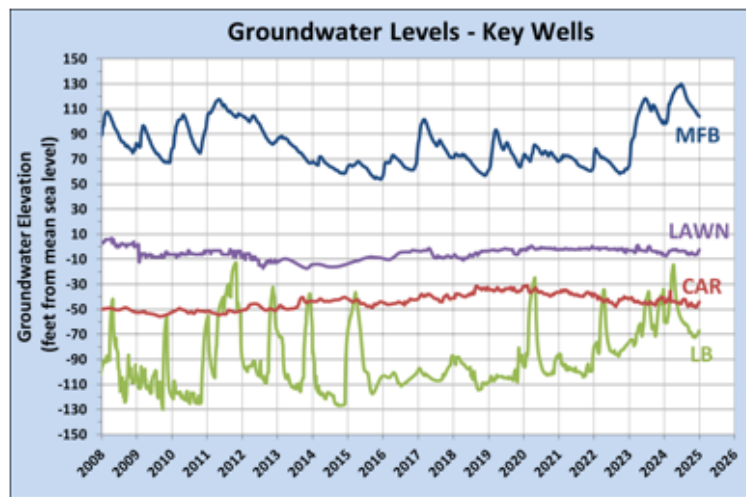
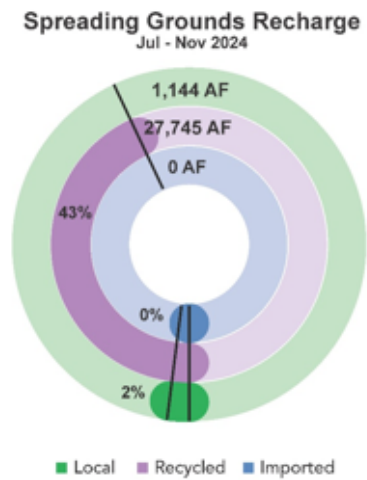
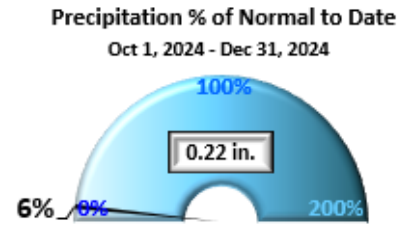
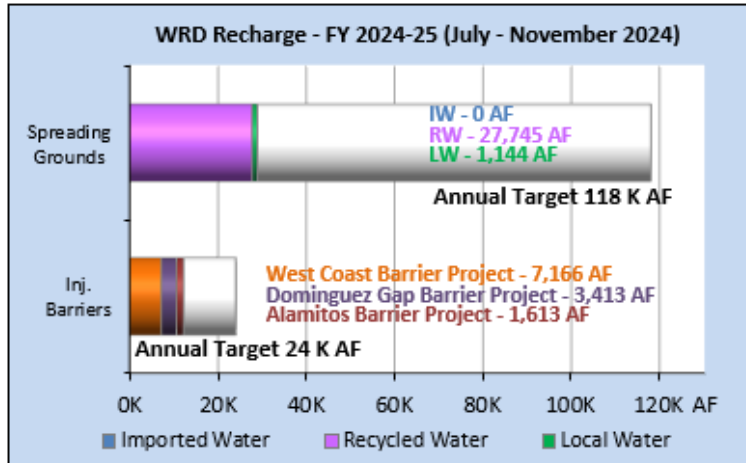


GROUNDWATER BASIN UPDATE FOR JANUARY 2025

GROUNDWATER BASINS AT A GLANCE*



* - Preliminary numbers, subject to change.

SUMMARY

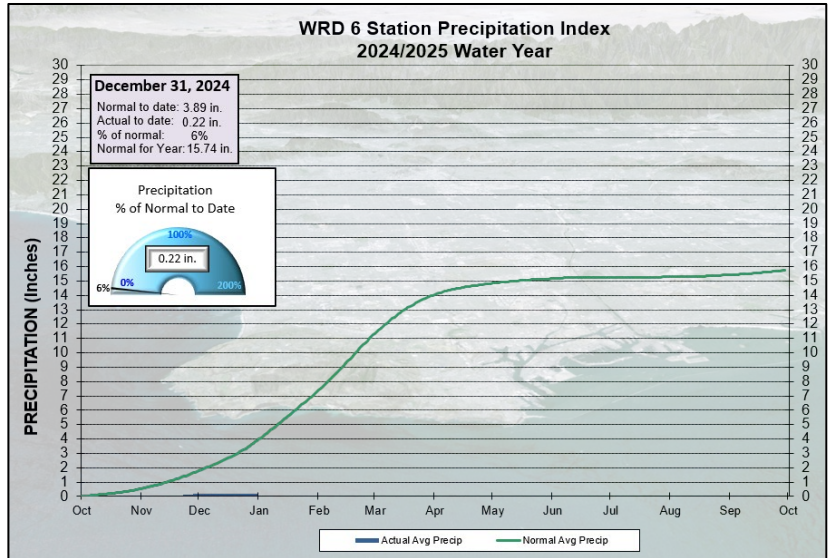
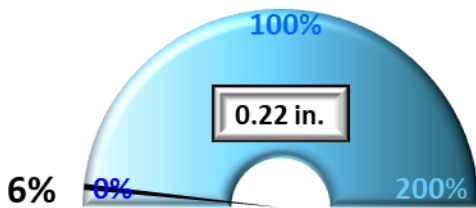
Staff monitors groundwater conditions in the District’s service area throughout the year. A summary of the latest information is presented below.

Precipitation (December 2024)

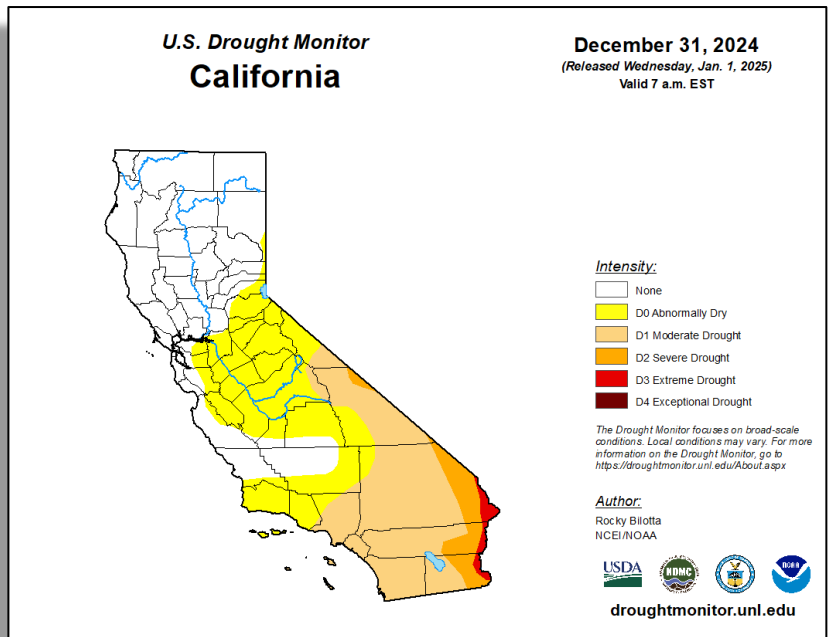
The WRD 6 Station Precipitation Index reports that for the 2024-25 Water Year, there has been below average rainfall (0.22 inches) through December 31, 2024. The normal rainfall for this time period is 3.89 inches, so the District is 6% of normal.

Precipitation % of Normal to Date

Oct 1, 2024 - Dec 31, 2024



As of December 31, 2024, the U.S. Drought Monitor is reporting 59% of the State is abnormally dry (up 17%), 32% under moderate (up 15%), 6% under severe (same), 1% under extreme (same), and 0% exceptional (same) drought conditions. According to the U.S. Drought Monitor, Los Angeles County is currently abnormally dry or in a moderate drought.



Reservoirs (as of January 6, 2025)

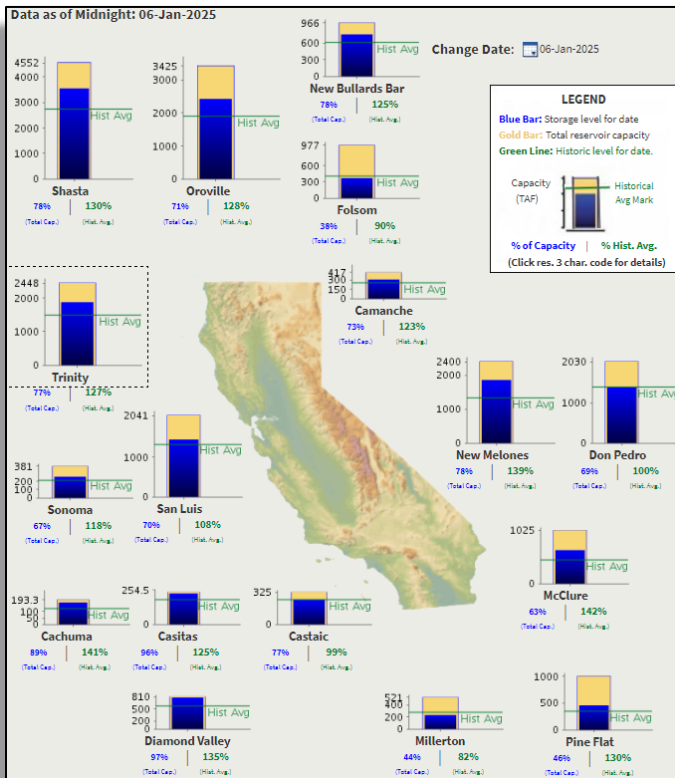
For the 21 reservoirs reported monthly to the committee, water levels have increased in 15 of 21 reservoirs. The largest increase occurred at Lake Shasta (0.77 million acre feet, MAF). The smallest increase occurred at Lakes McClure, Sonoma, and Perris (<0.01 MAF). The largest decrease (-0.30 MAF) occurred at Lake Powell. The smallest decrease (<-0.01 MAF) occurred at Lakes Don Pedro, Cachuma, Casitas, and Diamond Valley.

MWD Reservoirs (SWP)
Storage in Million Acre Feet

Reservoir	Capacity	Storage	% Full	Change
Trinity Lake (CLE)	2.45	1.87	77%	0.21
Lake Shasta (SHA)	4.55	3.55	78%	0.77
Lake Oroville (ORO)	3.54	2.41	70%	0.48
New Bullards Bar (BUL)	0.97	0.75	78%	0.14
Folsom Lake (FOL)	0.98	0.37	38%	0.05
Camanche Lake (CMN)	0.42	0.30	73%	-0.01
New Melones L. (NML)	2.40	1.86	78%	0.04
Don Pedro Res (DNP)	2.03	1.40	69%	0.00
Lake McClure (EXC)	1.02	0.65	63%	0.00
Lake Sonoma (WRS)	0.38	0.26	67%	0.00
San Luis Res (SNL)	2.04	1.43	70%	0.16
Millerton Lake (MIL)	0.52	0.23	44%	0.02
Pine Flat Res. (PNF)	1.00	0.46	46%	0.03
Cachuma Lake (CCH)	0.19	0.17	89%	0.00
Castaic Lake (CAS)	0.33	0.25	77%	0.01
Casitas Lake (CSI)	0.25	0.23	96%	0.00
Perris Lake (PRR)	0.13	0.11	80%	0.00
L. Silverwood (SLW)	0.08	0.07	93%	0.01

MWD Reservoirs (CRA)
Storage in Million Acre Feet

Reservoir	Capacity	Storage	% Full	Change
Lake Powell	23.31	8.62	37%	-0.30
Lake Mead	26.12	8.71	33%	0.22
Diamond Valley L (DVL)	0.81	0.79	97%	0.00



Black Text - Decrease or no change in storage since the last report.
Green Text - Increase in storage since the last report.

These 21 reservoirs are at 47% capacity (34.48 MAF) which is up 1.82 MAF (2%) from the prior month (1.9 MAF State Water Project [SWP] and -0.08 MAF Colorado River Aqueduct [CRA]).

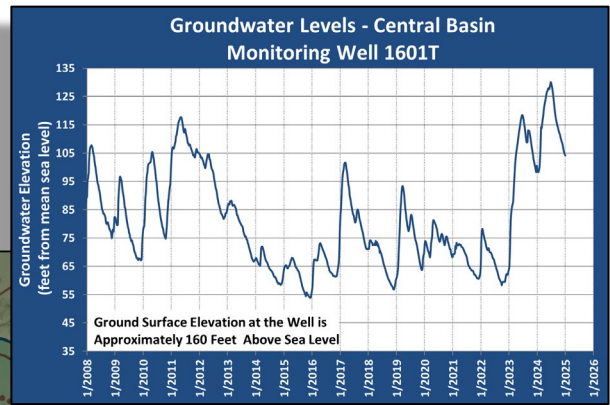
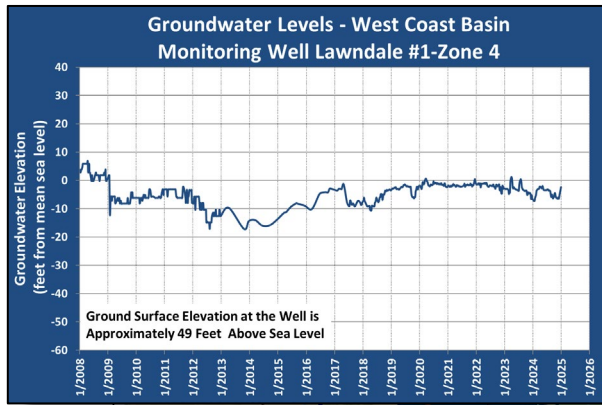


Did you know?

Water regulates the Earth's temperature. It also regulates the temperature of the human body, carries nutrients and oxygen to cells, cushions joints, protects organs and tissues, and removes wastes.

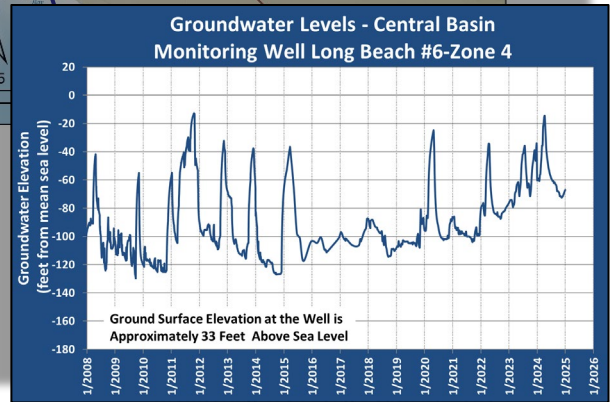
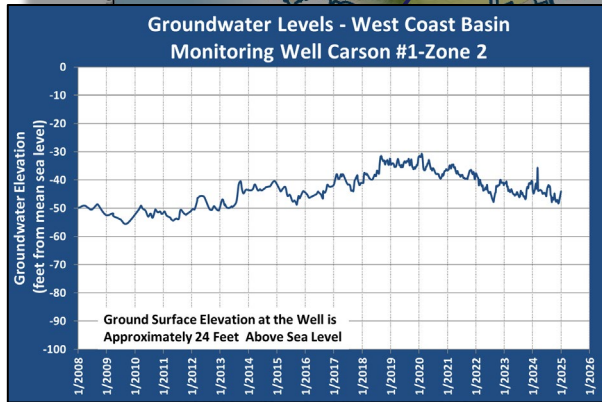
Groundwater Levels (through January 2, 2025)

Groundwater levels in key monitoring wells are shown in the hydrographs below.



Central Basin Key Well Long Beach #6 and West Coast Basin Key Wells Lawndale #1 & Carson #1 are in a confined aquifer and do not respond readily to rainfall but instead to changes in pumping patterns and barrier recharge.

Central Basin Key Well 1601T is between the two spreading grounds and rises rapidly with rainfall and replenishment but falls sharply during dry spells and lack of replenishment.



Groundwater Level Changes in Key Wells

Well Name	Since Last Report	Since Same Time the Previous Year
Central Basin Key Well 1601T	Decreased 2.6 feet	Increased 5.6 feet
Central Basin Key Well Long Beach #6 4	Increased 4.0 feet	Decreased 6.8 feet
West Coast Basin Key Well Lawndale #1 4	Increased 4.0 feet	Increased 4.3 feet
West Coast Basin Key Well Carson #1 2	Increased 4.0 feet	Decreased 0.7 foot

Bold indicates a change in direction (decreasing or increasing) since the last report.

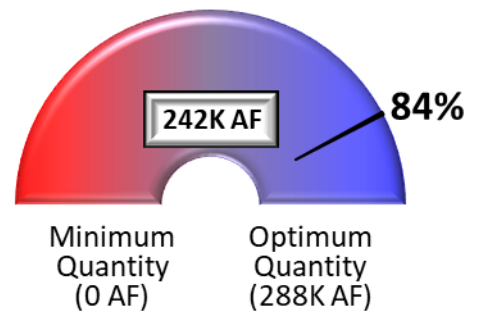
Optimum and Minimum Groundwater Quantity (January 2, 2025)

The Board of Directors adopted an Optimum and Minimum Quantity for groundwater in the District to define an appropriate operating range that would sustain adjudicated pumping rights, leave room for future storage projects, and identify a lower limit. The amounts are based on the accumulated overdraft concept, which the District tracks year by year based on changes in groundwater storage.

After an extensive review of over 70 years of water level fluctuations and discussions with the Board and pumping community, Water Year 1999/2000 was recognized as a representative year for the Optimum Quantity, which equated to an accumulated overdraft of approximately 612,000 acre feet. The Minimum Quantity was defined as an accumulated overdraft of 900,000 acre feet, which allowed an operating range from 0 acre feet (minimum) to 288,000 acre feet (optimum). The Board also adopted a policy to make up the groundwater deficit should the accumulated overdraft fall too far below the Optimum Quantity.

The Accumulated Overdraft as of January 2, 2025, has been estimated at 658,298 acre feet (subject to change), which is 241,702 acre feet above the Minimum Quantity and 46,298 acre feet below Optimum Quantity. The Basin is at 84% of Optimum Quantity which is 3% lower than what was reported last month (~10,000 AF lower).

**GW Basin Operating Range
January 2, 2025**



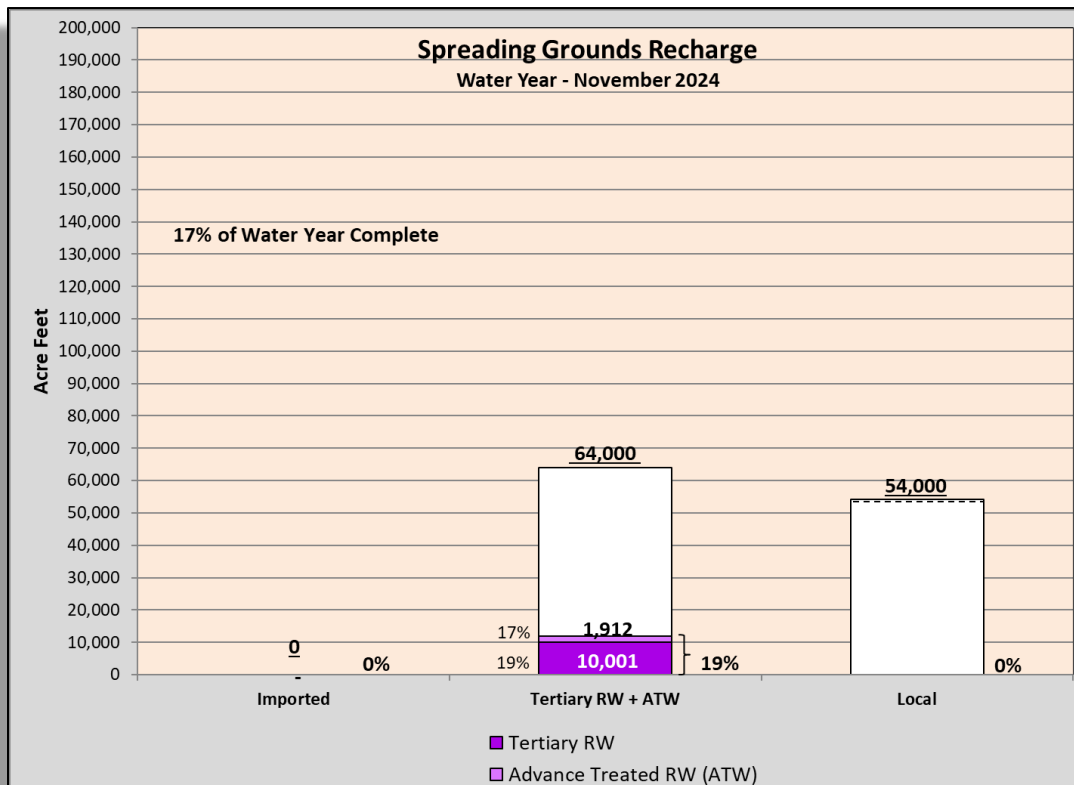
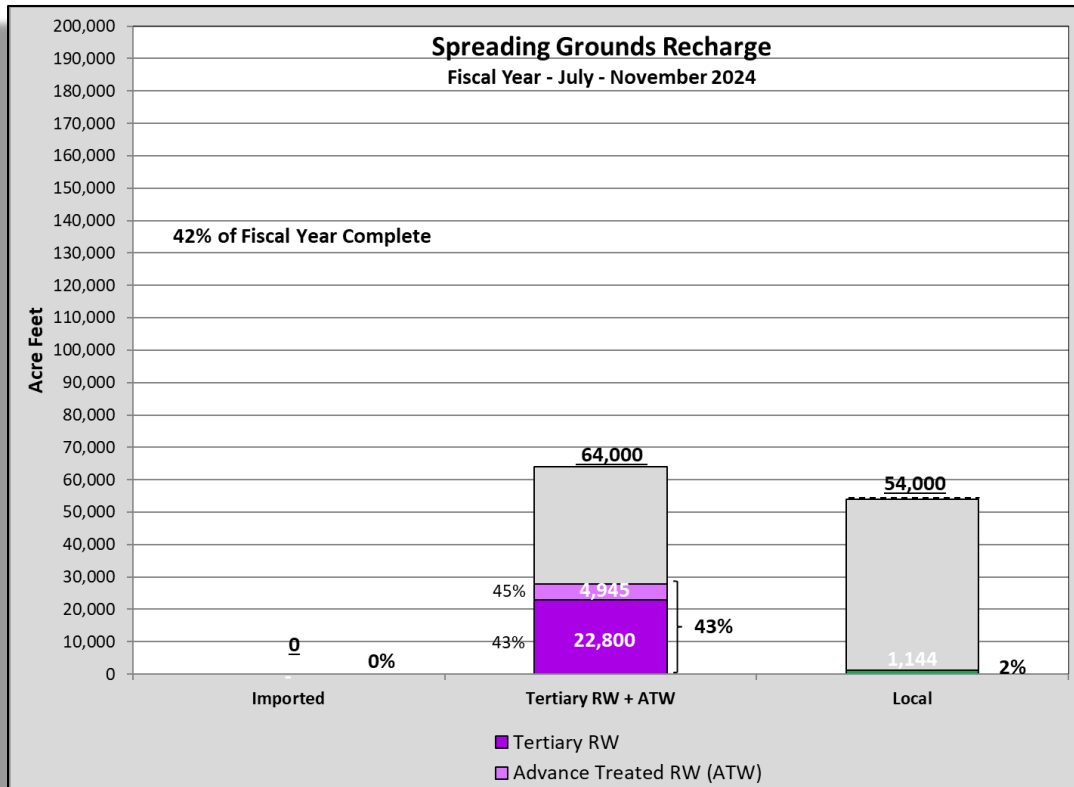
FACT:

Liquid water gathers the individual molecules in the closest spacing possible (i.e. tightly packed). As a result, water is not compressible since the molecules are already as close to each other as possible.



Montebello Forebay Spreading Grounds (July - November 2024)

The following Charts show the preliminary spreading grounds replenishment water for the current Fiscal Year (2024-25; 5 months) and Water Year (2024-25; 2 months):



No imported water purchases were planned for Fiscal Year 2024-25.

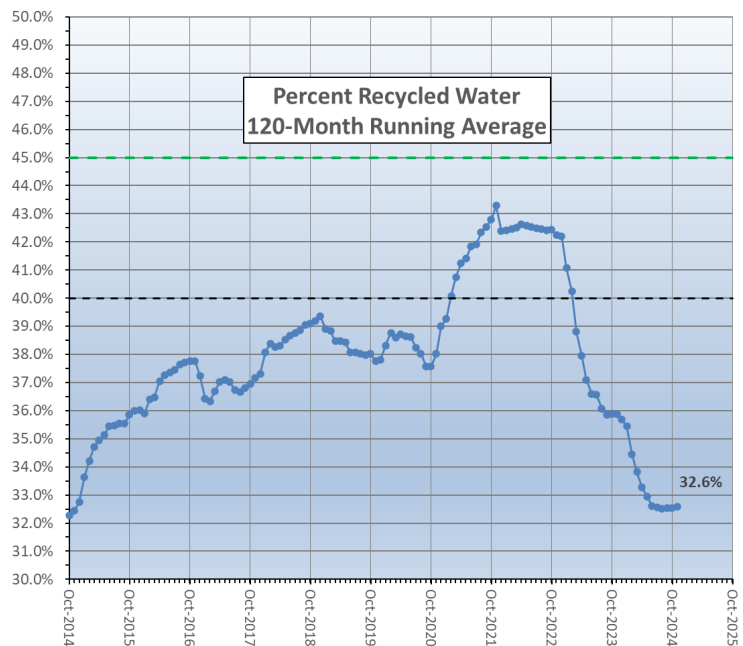
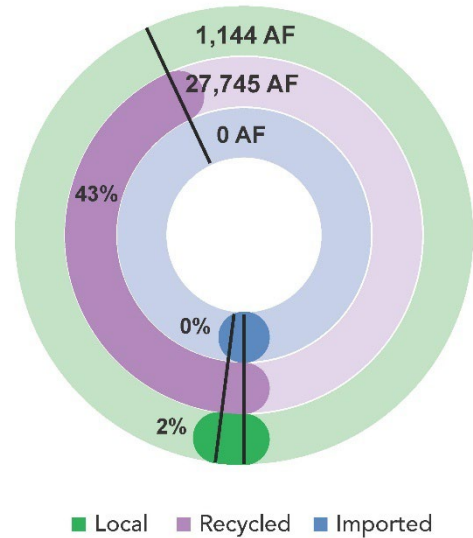
Local water (stormwater plus dry weather urban runoff) is captured by the Los Angeles County Department of Public Works (LACPW) at the spreading grounds for recharge. Local water amounts are determined as the sum of the total water conserved at the spreading grounds less the imported and recycled water deliveries. For the 2024-25 Fiscal Year, 1,144 acre feet of local water capture have been reported by the LACPW.

Preliminary numbers for the 2024-25 Fiscal Year show that approximately 27,745 acre feet of recycled water has been recharged with 4,945 acre feet consisting of advanced treated water from the ARC AWTF and 22,800 acre feet of tertiary recycled water. Presuming the advanced treated water as “Null Water”, the 120-month running average of the recycled water contribution in the Montebello Forebay is 32.6% and the regulatory maximum is 45%, with additional monitoring being required once 40% is reached.

Tertiary Recycle Water Permit Update

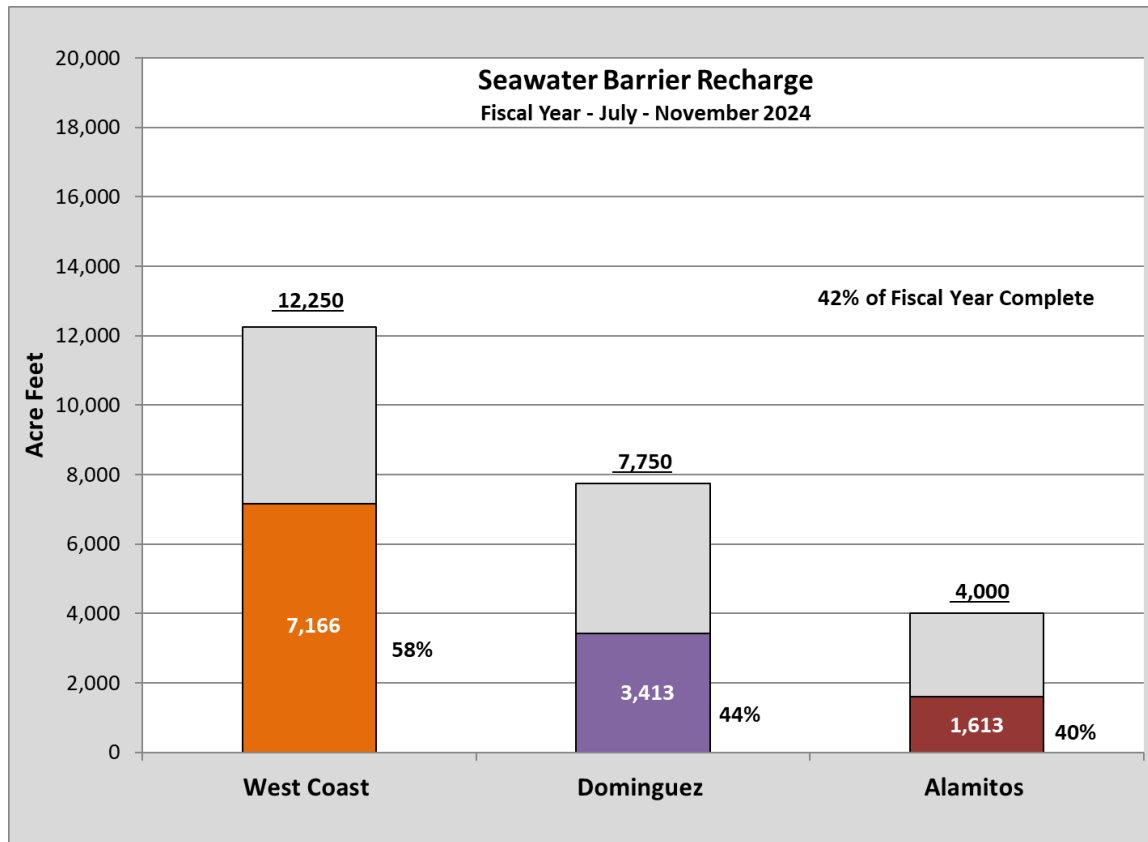
The permit is continuing to progress with LACSD and WRD staff working to update pertinent sections of the new Title 22 Engineering Report. Due to the persistent drought conditions over the past few decades and associated emergency drought proclamation by Governor Newsom, LACSD and WRD submitted a request to modify the recycled water contribution percentage to 50% and the advanced treated water classification to diluent in a letter to the LARWQCB and CA-DDW dated July 8, 2022. LACSD and WRD staff are targeting 2025 to have the new Title 22 Engineering Report submitted, including the requests to increase the recycled water contribution percentage to 50% and reclassify the advanced treated water as diluent.

Spreading Grounds Recharge
Jul - Nov 2024



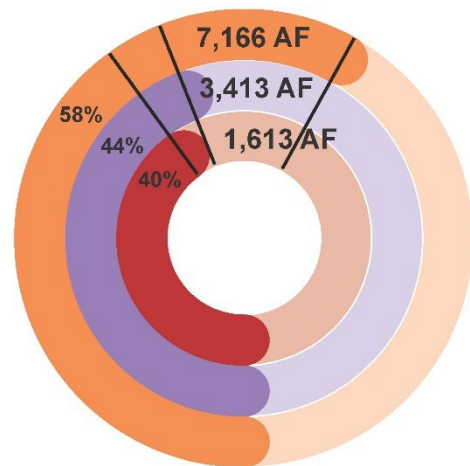
Seawater Barrier Well Injection and Replenishment (July - November 2024)

The following Chart shows the barrier water injection:



Preliminary numbers for the 2024-25 Fiscal Year show that the West Coast Barrier has used 7,166 acre feet of the total 12,250 acre feet planned for injection, 58% of total for the Fiscal Year. The Dominguez Gap Barrier used 3,413 acre feet of the total 7,750 acre feet planned for injection, 44% of the total for the Fiscal Year. The Alamos Gap Barrier, on the WRD side, used 1,613 acre feet of the total 4,000 acre feet planned for injection, 40% of the total for the Fiscal Year. Advanced Treated Recycled Water (ATW) usage at the three barriers for the Fiscal Year to date is 57% at the West Coast Barrier (+2%), 78% at the Dominguez Gap Barrier (+5%), and 73% Alamos Gap Barrier (-3%). The combined ATW usage at all three barriers is 65% (+3%).

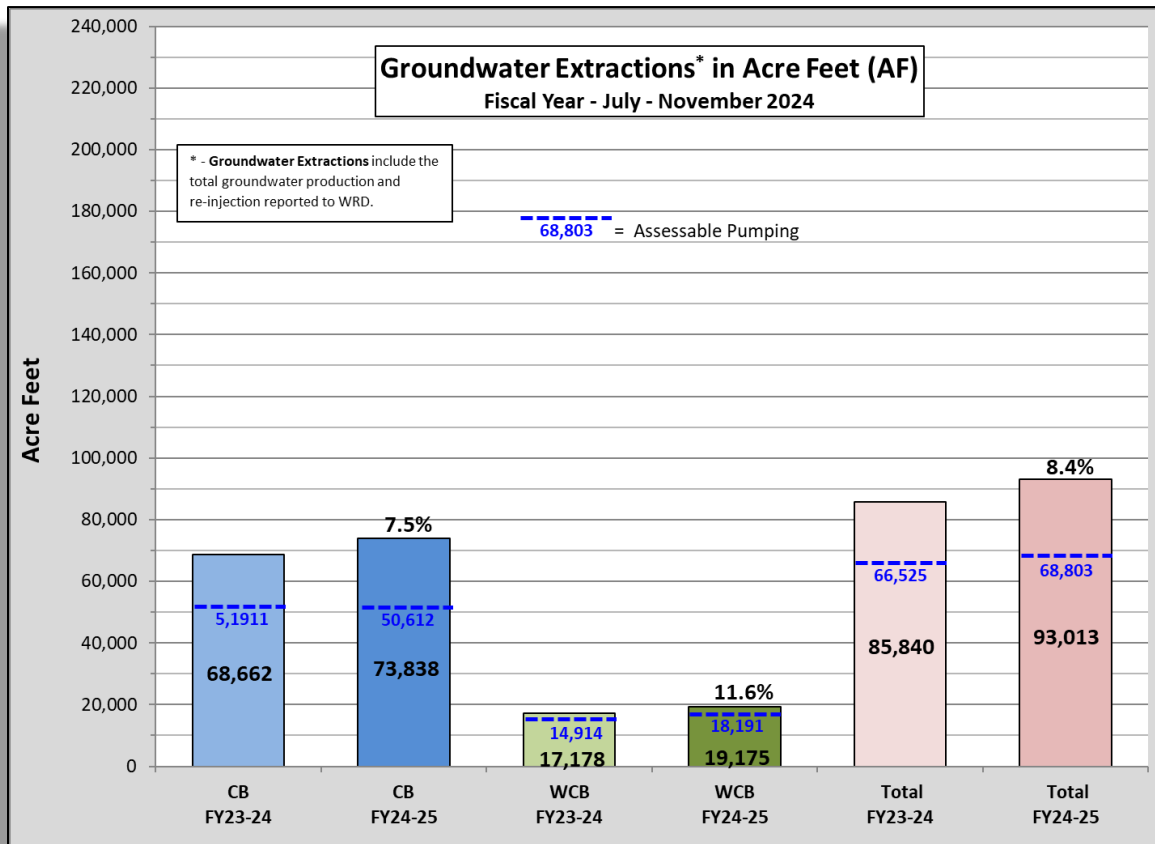
Seawater Barrier Recharge Jul - Nov 2024



■ West Coast ■ Dominguez Gap ■ Alamos Gap

Total Pumping (Fiscal Year 2024-25, July - November 2024)

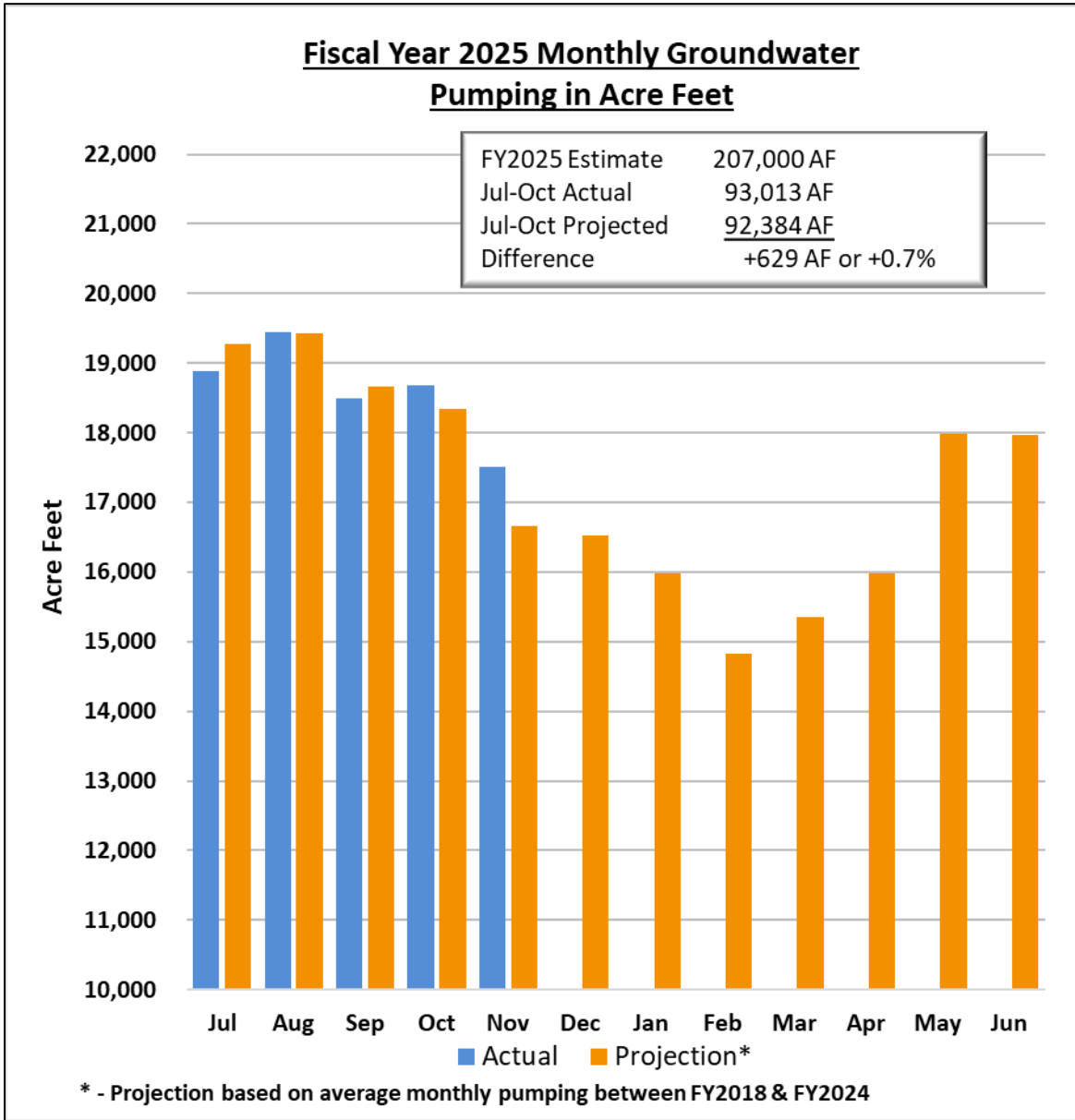
Preliminary numbers for groundwater production in the District for the Fiscal Year 2024-25 (July-November) indicate total pumping in the Central Basin was up 5,176 acre feet from the same time of the previous fiscal year (+7.5%) and the West Coast Basin total pumping was 1,997 acre feet higher than the previous fiscal year (+11.6%). The total pumping is 93,013 acre feet compared to 85,840 acre feet during the same time the previous year for an increase of 7,173 acre feet, or +8.4%. The current pumping data does not include eight (8) Central Basin pumpers and five (5) West Coast Basin pumpers, who have not yet reported, for an estimated 400 additional acre feet.



Interesting...

Wellhead protection is a pollution prevention and management strategy used to protect groundwater used for drinking water.

Preliminary numbers indicate 93,384 acre feet of groundwater have been pumped this fiscal year and is 0.7% above the projected fiscal year to date goal of 92,384 acre feet (or +629 acre feet). Monthly actual production versus the 7-year average monthly production projections (FY 2018 through 2024) are included in the chart below.



“Water is the lifeblood of our bodies, our economy, our nation and our well-being.” - *Stephen Johnson*



For the Fiscal Year 2024-25 (July-November 2024), staff has tracked the production trends of the top five (5) producing pumpers and the bottom five (5) producing pumpers in each basin. These pumpers are identified in the following tables and are based on the change in volume (in acre feet) compared to the same time period for the previous Fiscal Year. Production data for all the pumpers can be found in the attached Exhibit A (Central Basin) and Exhibit B (West Coast Basin).

Production Trends - Central Basin				
Top 5 Producing <u>by Volume</u> (AF)	Jul-Nov 2023	Jul-Nov 2024	Difference	% Change
Long Beach, City - CB	9,284.49	13,942.67	4658.18	33.41
Suburban Water Systems	572.95	1,177.49	604.54	51.34
Santa Fe Springs, City	256.39	809.82	553.43	68.34
Downey, City	6,148.50	6,299.25	150.75	2.39
South Gate, City	3,425.05	3,574.18	149.13	4.17
Bottom 5 Producing <u>by Volume</u> (AF)	Jul-Nov 2023	Jul-Nov 2024	Difference	% Change
Whittier, City	2,951.95	2,365.71	-586.24	-24.78
Lynwood, City	2,033.64	1,585.04	-448.60	-28.30
Bellflower-Somerset MWC	2,093.09	1,746.24	-346.85	-19.86
Signal Hill, City	519.52	287.34	-232.18	-80.80
Vernon, City	2,045.88	1,980.10	-65.78	-3.32

Production Trends – West Coast Basin				
Top 5 Producing <u>by Volume</u> (AF)	Jul-Nov 2023	Jul-Nov 2024	Difference	% Change
Torrance, City	207.55	1,838.54	1630.99	88.71
Golden State Water Co. - WB	3,707.35	5,109.79	1402.44	27.45
Phillips 66 Co. - Alpha 7093	1,985.11	2,550.11	565.00	22.16
Tesoro Refining	3,746.43	3,953.57	207.14	5.24
L.A. County Department of Parks	72.22	181.46	109.24	60.20
Bottom 5 Producing <u>by Volume</u> (AF)	Jul-Nov 2023	Jul-Nov 2024	Difference	% Change
Cal. Water Service Co. Dominguez - WB	2,738.53	2,446.38	-292.15	-11.94
Eco Services Operations	222.84	57.86	-164.98	-285.14
Inglewood, City	748.12	599.62	-148.50	-24.77
Cal. Water Service Co./Hawthorne Lease	252.42	140.62	-111.80	-79.51
Torrance Refining	504.27	403.20	-101.07	-25.07

Water Replenishment District (WRD) publishes the Groundwater Basin Update (GWBU) monthly. All information contained herein is preliminary and is meant to be a snapshot the status of the basins at the time of publication and should not constitute an official WRD report. All the information presented in the GWBU utilizes the best available data at the time of publication. Data provided herein is a compilation of WRD data and publicly available information from several of our partners including, by not limited to, the Los Angeles County Department of Public Works - Stormwater Engineering Division, Metropolitan Water District of Southern California, California Department of Water Resources, US Bureau of Reclamation, University of Nebraska - Lincoln, and the US Department of Agriculture - Natural Resources Conservation Service. The GWBU is prepared by Senior Hydrogeologist, Everett Ferguson, who can be contacted directly with questions at eferguson@wrd.org.

Central Basin Production Trends

Central Basin	July 2023 - November 2023	July 2024 - November 2024	Difference	%Change
ABC USD	8.99	5.40	-3.59	-66.48
American Text. M.	26.11	29.61	3.50	11.82
Artesia, City	1.12	1.05	-.07	-6.67
Atlas Iron and Metal Co.	0.09	0.10	.01	10.00
Bell Gardens, City	0.00	0.00	.00	0.00
Bellflower Home Garden	0.00	0.00	.00	0.00
Bellflower-Somerset MWC	2,093.09	1,746.24	-346.85	-19.86
Boeing Co.	25.93	21.26	-4.67	-21.97
Boeing, Compton Site	17.34	13.40	-3.94	-29.40
Cal. American Water Co. Alpha 0679	815.57	768.22	-47.35	-6.16
Cal. Water Service Co. (East LA)	4,605.35	4,656.00	50.65	1.09
Cal. Water Service Co. Dominguez - CB	458.74	566.25	107.51	18.99
Caltrans	7.80	2.36	-5.44	-230.51
Central Basin MWD	0.00	0.00	.00	0.00
Cerritos, City	3,243.67	3,388.89	145.22	4.29
Coast Packing Co.	56.13	62.28	6.15	9.87
Commerce, City	700.71	716.89	16.18	2.26
Compton, City	2,942.80	2,996.83	54.03	1.80
Darling-Delaware Co.	0.00	0.00	.00	0.00
Defense Logistic Agency	1.01	0.61	-.40	-65.57
Demunno Kerdoon	0.60	0.61	.01	1.64
Downey, City	6,148.50	6,299.25	150.75	2.39
El Rancho Unified School District	0.00	0.00	.00	0.00
Golden State Water Co. - CB	7,715.93	7,736.64	20.71	0.27
HMB Bandini, LLC	0.00	0.11	.11	100.00

Central Basin	July 2023 - November 2023	July 2024 - November 2024	Difference	%Change
Huntington Park, City - Alpha 2378	1,150.69	1,213.52	62.83	5.18
L.A. County Department of Parks	0.00	0.00	.00	0.00
LA County Rancho Los Amigos	95.15	104.18	9.03	8.67
La Habra Heights County WD	1,136.63	1,262.63	126.00	9.98
Lakewood - City	3,079.88	3,032.71	-47.17	-1.56
Liberty Utilities - CB	1,876.05	1,812.47	-63.58	-3.51
Little Lake Cemetery District	0.00	0.00	.00	0.00
Long Beach, City - CB	9,284.49	13,942.67	4658.18	33.41
Los Angeles, City - CB	6.77	7.23	.46	6.36
Lunday-Thagard	0.00	0.00	.00	0.00
Lynwood Park Mutual Water Co.	11.65	15.66	4.01	25.61
Lynwood, City	2,033.64	1,585.04	-448.60	-28.30
Maywood Mutual No. 1	275.71	277.50	1.79	0.65
Maywood Mutual No. 2	395.51	400.36	4.85	1.21
Maywood Mutual No. 3	625.68	618.43	-7.25	-1.17
Montebello Land and Water Co.	1,282.30	1,315.81	33.51	2.55
Newark Group, Inc.	64.79	60.16	-4.63	-7.70
Norwalk, City	149.54	134.56	-14.98	-11.13
Omega OU1/OU3 LLC	1.35	1.82	.47	25.82
Orchard Dale Water District	810.29	872.67	62.38	7.15
PABCO Building Products	0.00	0.00	.00	0.00
Paradise Memorial Park	5.42	5.70	.28	4.91
Paramount USD	0.72	0.16	-.56	-350.00
Paramount, City	1,177.33	1,171.81	-5.52	-0.47
Pico Rivera, City	1,731.27	1,796.90	65.63	3.65
Pico Water District	1,160.58	1,165.27	4.69	0.40
Rockview Dairies	0.00	72.11	72.11	100.00
Roman Catholic Archbishop - CB	147.67	168.87	21.20	12.55

Central Basin	July 2023 - November 2023	July 2024 - November 2024	Difference	%Change
Rowland Water District	0.00	0.00	.00	0.00
San Gabriel Valley Water Co.	1,324.13	1,388.31	64.18	4.62
Santa Fe Springs, City	256.39	809.82	553.43	68.34
Scantlebury, Robert P.	0.12	0.12	.00	0.00
SFPP L.P.	0.00	0.00	.00	0.00
Signal Hill, City	519.52	287.34	-232.18	-80.80
South Gate, City	3,425.05	3,574.18	149.13	4.17
South Montebello Irrigation Dist	721.83	734.03	12.20	1.66
Southern California Edison Co. - CB	0.53	0.00	-.53	-100.00
St. John Bosco School	3.48	4.10	.62	15.12
Suburban Water Systems	572.95	1,177.49	604.54	51.34
Tract 180 Water Co.	529.85	534.75	4.90	0.92
Tract 349 Mutual Water Co.	269.85	278.89	9.04	3.24
Tucker, William M.	0.02	0.00	-.02	-100.00
Vernon, City	2,045.88	1,980.10	-65.78	-3.32
Virginia Country Club	172.35	155.96	-16.39	-10.51
Walnut Park Mutual	457.77	462.05	4.28	0.93
Whittier Union HSD	11.95	10.63	-1.32	-12.42
Whittier, City	2,951.95	2,365.71	-586.24	-24.78
WRD	25.81	24.59	-1.22	-4.96
Yamamoto, Alice	0.00	0.00	.00	0.00

West Coast Basin Production Trends

West Basin	July 2023 - November 2023	July 2024 - November 2024	Difference	%Change
	0.00	0.00	.00	0.00
ABC Nursery	5.00	0.00	-5.00	-100.00
Cal. Water Service Co. Alpha 7050	431.71	431.74	.03	0.01
Cal. Water Service Co. Dominguez - WB	2,738.53	2,446.38	-292.15	-11.94
Cal. Water Service Co./Hawthorne Lease	252.42	140.62	-111.80	-79.51
Eco Services Operations	222.84	57.86	-164.98	-285.14
Golden State Water Co. - WB	3,707.35	5,109.79	1402.44	27.45
Hillside Memorial Park	54.93	67.21	12.28	18.27
Honeywell International	0.00	0.00	.00	0.00
Inglewood, City	748.12	599.62	-148.50	-24.77
Kinder Morgan Liquids Terminals	17.46	14.49	-2.97	-20.50
L.A. County Department of Parks	72.22	181.46	109.24	60.20
L.A. County Sanitation Districts-JWPCP	0.00	0.00	.00	0.00
Lockheed Martin Corp.	0.00	0.00	.00	0.00
Lomita, City	0.00	0.00	.00	0.00
Long Beach, City - WB	0.41	0.00	-.41	-100.00
Manhattan Beach, City	79.01	38.69	-40.32	-104.21
Montrose Chemical Corp.	-0.08	0.05	.13	260.00
Myron Z. Chalavin	0.00	0.00	.00	0.00
Phillips 66 Co. - Alpha 7093	1,985.11	2,550.11	565.00	22.16
Rolling Hills Country Club	133.00	221.00	88.00	39.82
Roman Catholic Archbishop - WB	67.08	144.13	77.05	53.46
SCI Funeral Services	18.78	25.52	6.74	26.41
Shell Oil Co NCWUP	19.28	19.86	.58	2.92
Southern California Edison Co. - WB	11.99	8.26	-3.73	-45.16

West Basin	July 2023 - November 2023	July 2024 - November 2024	Difference	%Change
Tesoro Refining	3,746.43	3,953.57	207.14	5.24
Torrance Refining	504.27	403.20	-101.07	-25.07
Torrance, City	207.55	1,838.54	1630.99	88.71
West Basin Brewer Desalter	0.00	0.00	.00	0.00